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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,172	11/19/2003	Thomas J. Bachinski	12929.1119US02	9348
7590 08/11/2004		EXAMINER		
Merchant & Gould P.C.			JEFFERY, JOHN A	
P.O. Box 2903 Minneapolis, MN 55402-0903			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	A	Annlinent/n\			
	Application No.	Applicant(s)			
Office Action Comments	10/718,172	BACHINSKI ET AL.			
Office Action Summary	Examiner	Art Unit			
	John A. Jeffery	3742			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on					
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.				
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ☐ Claim(s) 1-40 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-22,24-37 and 39 is/are rejected. 7) ☐ Claim(s) 23,38 and 40 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.				
Application Papers		•			
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 19 November 2003 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	re: a) $\square$ accepted or b) $\square$ object drawing(s) be held in abeyance. Settion is required if the drawing(s) is ob-	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary				
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date</li> </ol>	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate Patent Application (PTO-152)			

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 3, the parenthetical expression must be deleted for clarity since it is unclear whether the limitation is intended to be positively recited. Also, in line 2, "plan" must be changed to "plane."

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5, 6, 25, 27-30, 33, and 36 are rejected under 35 USC 102(b) as being anticipated by Holland (US 3,739,792). Holland (US 3,739,792) discloses an heated umbrella comprising a shroud formed by the umbrella canopy 2 defining an inner volume within the canopy, and a plurality of electric radiant heating elements 112

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attached to downwardly-directed radial supports 16. See Figs. 1-5 and col. 3, lines 31-42. When energized, the radiant heating elements inherently radiate infrared heat to the user underneath the canopy. Heat is reflected not only by the coated canopy as noted in col. 5, lines 15-20, but also by the enveloping metallic rib 16 that surrounds electric heating element 112 as shown in Fig. 5.

Regarding claim 36, the recitation of the limitation "patio umbrella" in the preamble merely recites the umbrella's intended use and does not form part of the structure per se. It is well settled that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Also, a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the <u>structural</u> limitations of the apparatus claimed. See *Ex parte Masham*, 2 USPQ 2d 1647 (1987). Here, because the umbrella is capable of use on a patio, the recitation of "patio umbrella" does not structurally distinguish over Holland (US 3,739,792).

## Joint Inventors--Common Ownership Presumed

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103, the examiner presumes that the subject matter of the

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various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligations under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 4, 8, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holland (US 3,739,792) in view of EP577196 and further in view of Phyle (US 5,584,564). The claims differ from the previously cited prior art in calling for the infrared heating element to comprise an electric filament in a quartz glass housing. Enclosing infrared heating filaments within quartz glass housings, however, is well known in the art. EP577196, for example, discloses an infrared space heating lamp comprising a central infrared radiating filament 7 enclosed within a glass housing. As noted in col. 1, lines 20-23, quartz glass is known as the surrounding housing material

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in infrared lamps. By surrounding the infrared radiating filament with a quartz glass envelope, the filament is protected from inadvertent contact thus prolonging the life of the filament as well as protecting the user from accidental contact therewith.

In view of EP577196, and further noting Phyle (US 5,584,564) who teaches mounting elongated lamps 12 along the support members of an umbrella in Figs. 4, 5, and 12, it would have been obvious to one of ordinary skill in the art to surround the heated filaments of Holland (US 3,739,792) with a quartz housing to protect the filament from damage by inadvertent contact thus prolonging the life of the filament, as well as protecting the user from accidental contact therewith.

Regarding claim 8, no criticality is seen in the choice of wavelengths emitted from the lamps and such a choice is well within the level of one of ordinary skill in the art given the amount of infrared heat to be imparted to the user.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holland (US 3,739,792) in view of Sheppard et al (US 5,216,948). The claim differs from the previously cited prior art in calling for a heat sensor to monitor temperatures of objects heated by the elements. Providing a heat sensor within an electrically-heated shroud, however, is well known in the art. Sheppard et al (US 5,216,948), for example, discloses a thermostat 35 disposed within a heated shroud so that heat produced by infrared heater 23 is controlled automatically responsive to sensed temperature. See Fig. 3 and col. 3, lines 43-45 and col. 4, lines 23-28. In view of Sheppard et al (US 5,216,948), it would have been obvious to one of ordinary skill in the art to provide a

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heat sensor in the previously described apparatus so that heat produced by infrared heater 23 is controlled automatically responsive to sensed temperature.

Claims 3, 9-21, 26, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holland (US 3,739,792) in view of GB2381308. The claims differ from the previously cited prior art in calling for the heating element to provide substantially solely infrared heat. Although the heat radiated by the electric heaters of Holland (US 3,739,792) is predominantly infrared heat, the reference is silent whether the heat is substantially solely infrared heat.

But providing a radiant heat source for a patio heater such that the heat is substantially solely infrared heat is known in the art. GB2381308, for example, discloses a plurality of infrared electric heating panels 3 in conjunction with lights 9 so that both infrared heat and illumination can be provided either simultaneously or independently. See text of claim 5 on Page 2 of GB2381308. Therefore, the user may energize the IR heater panels to emit solely infrared heat or the lights for visible radiation, or both.

In view of GB2381308, it would have been obvious to one of ordinary skill in the art to provide a infrared heat source that emits solely infrared heat so that it may be used in conjunction with visible light sources to enable simultaneous or independent operation of both energy sources. Such a capability increases flexibility of operation by enabling the user to select infrared heat, light, or both.

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Regarding claim 31, no criticality is seen in the use of ceramic fiber reflector structures in lieu of the metallic reflectors of Holland (US 3,739,792). Accordingly, such reflectors do not constitute a patentably distinguishable feature of the invention.

Claims 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holland (US 3,739,792) in view of EP577196, Phyle (US 5,584,564), and further in view of GB2381308. The claims differ from the previously cited prior art in calling for at least one chair. Although Phyle (US 5,584,564) discloses a table associated with the umbrella and lamps, there is no discloses of providing chairs associated with the table. GB2381308, however, on Page 1, line 7 discloses the use of chairs in conjunction with tables designed to accommodate a parasol inserted within the table. In view of GB2381308, it would have been obvious to one of ordinary skill in the art to provide chairs along with the table of the previously described apparatus so that users could sit underneath the parasol.

Claims 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holland (US 3,739,792) in view of GB2381308 and further in view of Clark et al (US 5,964,233). The claims differ from the previously cited prior art in calling for combustion heating elements. But combustion heating elements for patio umbrellas are well known in the art noting combustion heater 18. See Fig. 1 and col. 2, lines 56-65. In view of Clark et al (US 5,964,233), it would have been obvious to one of ordinary skill

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in the art to use a combustion heater in the previously described apparatus so that the heater can be used in areas remote from AC power.

The claims also differ from the previously cited prior art in calling for a switch to automatically turn the element off when the umbrella is closed. Such switches, however, are well known in the art as evidenced by Clark et al who discloses a microswitch actuator 52 that turns the heater off when the umbrella is closed. See col. 7, lines 1-12. In view of Clark et al, it would have been obvious to one of ordinary skill in the art to provide a means to switch the heater off upon closing the umbrella so that the heater is energized only when it is needed thereby saving energy, improving safety, and prolonging the life of the heating elements.

## Allowable Subject Matter

Claims 23, 38, and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Other Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The art should be both separately considered and considered in conjunction with the previously cited prior art when responding to this action. WO 019, EP 178, EP 979, DE 230, US 990 (note electric heater 351B in Fig. 2 and col. 6, line 24), EP 597 (note electric heater in col. 7 and Figs. 8A-8C) disclose umbrellas and

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parasols with radiant heaters. US 135, US 532, US 799, US 224 disclose umbrellas with lamps relevant to the instant invention. GB 656 and US 040 disclose electrically heated shrouds relevant to the instant invention.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Jeffery whose telephone number is (703) 306-4601. The examiner can normally be reached on Monday - Thursday from 7:00 AM to 4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans, can be reached on (703) 305-5766. All faxes should be sent to the centralized fax number at (703) 872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

JOHN A. JEFFERY PRIMARY EXAMINER

8/10/04